

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/09797

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A61K 35/00(2006.01);A61K 38/00(2006.01);C07K 14/00(2006.01)

USPC: 514/1,2;530/300

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 514/1, 2; 530/300

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| x | US 6,423,703 (TRACEY et al) 17 January 2002 (17.01/2002), Abstract. col 3. col 8. | 1-2, 5-8 |
| y | | 3-4 |
| y | KIM Y.K. et al. Expression of PAS within hypothalamic neurons: a model for decreased food intake after C75 treatment, 2002.J. Endocrinol Metab. 283, E867-E879. see abstract and introduction. | 3 |
| y | LEON J. et al. Modulation of rat striatal glutamatergic response in search for new neuroprotective agents: evaluation of melatonin and some kynurenic derivatives. 2003. Brain Research Bulletin. 45, 525-530. See abstract and intro. | 4 |



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" documents which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" documents referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"Z"

document member of the same patent family

Date of the actual completion of the international search

31 May 2007 (31.05.2007)

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INTERNATIONAL SEARCH REPORTInternational application No.
PCT/US05/09797**C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| x | SHENG R. EDT, A tetrahydroacridine dervative inhibits cerebral ischemia and protects rat cortical neurons against glutamate-induced cytotoxicity. 2002. Acta Pharmacologica Sinica. 24, 390-393. see title. | 9 |

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International Bureau



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PCT

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL METHOD OF NEUROPROTECTION BY PHARMACOLOGICAL INHIBITION OF AMP-ACTIVATED PROTEIN KINASE

(57) Abstract: A method of neuroprotection which comprises administration of an AMPK inhibitor to a patient who is experiencing or has experienced a stroke, the compound being an AMPK inhibitor. Treatments with these agents significantly reduce the size of infarcts, and therefore minimize the loss of brain tissue and neurons. Thus, function can be preserved after stroke or ischemic injury in the brain. Similarly, neuronal loss can be minimized in degenerative diseases that cause neuronal compromise by perturbing energy utilization and availability in neurons.

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